

## **CHAPTER 6                      COORDINATION AND COMPLIANCE WITH ENVIRONMENTAL REQUIREMENTS**

This chapter documents the coordination and compliance efforts regarding statutory authorities including: environmental laws, regulations, Executive Orders (EO), policies, rules, and guidance. Consistency of the LCA Plan with other efforts is also described.

### **6.1                              ENVIRONMENTAL COORDINATION AND COMPLIANCE**

Following completion of the final PEIS, the District Engineer will issue a written Record of Decision (ROD) concerning the proposed action. The ROD will be issued within a framework of laws, regulations, and executive orders (EOs). These authorities establish regulatory compliance standards for environmental resources, pertain directly to USACE management of water resources development projects, or provide planning guidance for the management of environmental resources. Relevant Federal statutory authorities are listed in **table 6-1**. Relevant State of Louisiana statutory authorities are listed in **table 6-2**.

#### **6.1.1                              Compliance With Statutory Authorities**

Full compliance with statutory authorities will be accomplished upon review of this DPEIS by appropriate agencies and the public, completion of a final PEIS, and the signing of a ROD. Programmatic updates to the PEIS will be made in individual future decision documents and their associated NEPA compliance documents (EAs and EISs).

##### **6.1.1.1                              Clean Water Act - Section 404(b)(1)**

The USACE is responsible for administering regulations under Section 404(b)(1) of the Clean Water Act and other Federal authorities. Potential project-related impacts subject to these regulations would be evaluated on a project-by-project basis. Individual restoration plan project components would be closely coordinated with the District's Regulatory Branch and/or the Environmental Planning and Compliance Branch throughout planning and design phases.

##### **6.1.1.2                              Clean Water Act- Section 401 Water Quality**

A copy of the DPEIS will be provided to the LDEQ for programmatic review of potential Section 401 impacts. As individual projects selected to implement the LCA Plan are further conceived and designed, that phase of the program would also be fully coordinated with the LDEQ Office of Environmental Services.

**Table 6-1**  
**Relevant Federal Statutory Authorities**

<p>Abandoned Shipwreck Act of 1987  American Indian Religious Freedom Act  Antiquities Act of 1906  Archeological Resources Protection Act of 1979  Archeological and Historical Preservation Act  Bald Eagle Protection Act  Clean Air Act  Clean Water Act  Coastal Barrier Improvement Act of 1990  Coastal Barrier Resources Act of 1982  Coastal Wetlands Planning, Protection, and Restoration Act  Coastal Zone Management Act of 1972  Comprehensive Environmental Response, Compensation, and Liability Act  Consultation and Coordination with Indian Tribal Governments (EO 13175)  Emergency Planning and Community Right-to-Know Act of 1986  Emergency Wetlands Restoration Act of 1986  Endangered Species Act of 1973  Environmental Quality Improvement Act of 1970  Estuary Protection Act  Farmland Protection Policy Act  Federal Actions to Address Environmental Justice in Minority Populations &amp; Low-Income Populations (EO 12898)  Federal Facilities Compliance Act  Federal Land Policy and Management Act of 1976  Federal Water Pollution Control Act of 1972  Federal Water Project Recreation Act of 1965  Fish and Wildlife Conservation Act of 1980  Fish and Wildlife Coordination Act  Flood Control Act of 1944  Floodplain Management (EO 11988)  Food Security Act of 1985  Greening of the Government Through Efficient Energy Management (EO 13123)  Greening of the Government Through Leadership in Environmental Management (EO 12148)  Greening of Government Through Waste Prevention, Recycling, and Federal Acquisition (EO 13101)  Historic Sites Act of 1935</p>	<p>Historical and Archeological Data-Preservation  Land &amp; Water Conservation Fund Act of 1965  Magnuson-Stevens Fishery Conservation and Management Act of 1996  Marine Mammal Protection Act of 1972  Marine Protection, Research, and Sanctuaries Act of 1972  Migratory Bird Conservation Act  Migratory Bird Treaty Act  Migratory Bird Habitat Protection (EO 13186)  National Environmental Policy Act of 1969  National Historic Preservation Act of 1966  Native American Graves Protection and Repatriation Act  Noise Control Act of 1972  North American Wetlands Conservation Act  Pollution Prevention Act of 1990  Prime and Unique Farmlands, 1980 CEQ Memorandum  Protection and Enhancement of the Cultural Environment, 1971 (EO 11593)  Protection and Enhancement of Environmental Quality (EO 11991)  Protection of Children from Environmental Health Risks and Safety Issues (EO 13045)  Federal Compliance with Pollution Control Standards (EO 12088)  Protection of Cultural Property (EO 12555)  Protection of Wetlands (EO 11990)  Recreational Fisheries (EO 12962)  Resource Conservation and Recovery Act of 1976  Rivers and Harbors Act of 1899  River and Harbor and Flood Control Act of 1970  Safe Drinking Water Act  Submerged Land Act  Toxic Substances Control Act  Water Resources Development Acts of 1976, 1986, 1990, and 1992  Water Resources Planning Act  Watershed Protection &amp; Flood Prevention Act  Water Pollution Control Act Amendments of 1961  Wild and Scenic River Act  Wilderness Act</p>
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<b>Table 6-2</b> <b>Relevant State Statutory Authorities</b>	
Air Control Act Archeological Treasury Act of 1974 Louisiana Coastal Resources Program Louisiana Natural and Scenic Rivers System Act	Louisiana Threatened and Endangered Species and Rare & Unique Habitats Protection of Cypress Trees Water Control Act

### 6.1.1.3 **Coastal Zone Management Consistency**

The LCA Plan, being a large and complex program with a great many component projects still in the conceptual stage, would best be served by a phased consistency approach (personal communication with the LDNR). The overall goals and methods outlined in the LCA program would be coordinated with LDNR during the planning stage, and submitted for consistency review, once the preferred alternative has been identified. As individual projects selected to implement the LCA Plan are further conceived and designed, that phase of the program would also be fully coordinated with the state's Coastal Zone Management Program.

### 6.1.1.4 **Fish And Wildlife Coordination Act Report**

The USFWS has been a cooperating agency and collaborative partner in the LCA study process, with various experts on birds, mammals, amphibians, and reptiles actively participating on the various PDTs and contributing to the documentation and analysis of potential impacts by the various alternatives. A Fish and Wildlife Coordination Act Report is contained in appendix B of this DPEIS.

### 6.1.1.5 **Threatened And Endangered Species Act Coordination**

As individual projects selected to implement the LCA Plan are further conceived and designed, that phase of the program would be fully coordinated with the USFWS and NMFS for threatened and endangered species under their respective jurisdictions. See also section 3.13, Threatened and Endangered Species.

#### 6.1.1.5.1 ***Louisiana State Threatened And Endangered Species And Rare And Unique Habitats Coordination***

As individual projects selected to implement the LCA Plan are further conceived and designed, that phase of the program would also be fully coordinated with the Louisiana Department of Wildlife and Fisheries for threatened and endangered species and rare and unique habitats under their jurisdiction. See also section 3.13, Threatened and Endangered Species.

**6.1.1.6                      Essential Fish Habitat (EFH)**

NMFS has been a cooperating agency and collaborative partner in the LCA study process with experts on various marine organisms, as well as EFH, contributing to the documentation and analysis of potential impacts. These efforts would continue after an LCA Plan is selected. As individual projects selected to implement the LCA Plan are further conceived and designed, that phase of the program would be fully coordinated with NMFS. See also section 3.12, Essential Fish Habitat.

**6.1.1.7                      Clean Air Act - Air Quality Determination**

As individual projects selected to implement the LCA Plan are further conceived and designed, that phase of the program would be fully coordinated with the Air Quality Section of the LDEQ. See also section 3.20, Air Quality.

**6.1.1.8                      Historic & Cultural Resources**

As individual projects selected to implement the LCA Plan are further conceived and designed, that phase of the program would also be fully coordinated with the State Historic Preservation Officer (SHPO). See also section 3.17, Historic and Cultural Resources.

**6.1.1.9                      Prime And Unique Farmlands**

The NRCS has been a cooperating agency and collaborative partner in the LCA study process with experts on various soils, vegetation, and agriculture aspects contributing to the documentation and analysis of potential impacts. These contributions would continue after an LCA Plan has been selected. As individual projects selected to implement the LCA Plan are further conceived and designed, that phase of the program would be fully coordinated with the NRCS regarding Prime and Unique Farmlands. See also section 3.2, Soils.

**6.1.1.10                    Migratory Bird Habitat Protection**

Executive Order 13186 proclaims the intent to support the conservation of previous migratory bird conventions by integrating bird conservation principles, measures, and practices into agency activities and by avoiding or minimizing, to the extent practicable, adverse impacts on migratory bird resources when conducting agency actions. Migratory birds are of great ecological and economic value to the United States and to other countries. They contribute to biological diversity and bring tremendous enjoyment to millions of Americans who study, watch, feed, or hunt these birds throughout the United States and other countries.

This order requires that environmental analyses of Federal actions required by the NEPA or other established environmental review processes evaluate the effects of actions and agency plans on migratory birds, with emphasis on species of concern. In addition, each Federal agency shall restore and enhance the habitat of migratory birds, as practicable.

### 6.1.1.11 Executive Order 12898- Environmental Justice (EJ)

Environmental justice (EJ) can be traced to Title VI of the Civil Rights Act of 1964:

*No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.*

On February 11, 1994, the President issued Executive Order 12898 regarding Federal actions to address EJ in minority populations and low-income populations:

*Each Federal agency shall analyze the environmental effects, including human health, economic, and social effects, of Federal Actions, including effects on minority communities and low-income communities, when such analysis is required by the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. section 4321 et seq.*

Executive Order 12898 is designed to focus Federal attention on the environmental and human health conditions in minority communities and low-income communities. The order is also intended to promote non-discrimination in Federal programs substantially affecting human health and the environment, and to provide minority communities and low-income communities access to public information on, and an opportunity for public participation in, matters relating to human health or environmental planning, regulations, and enforcement.

Any restoration plan for Louisiana has the potential to affect people living along the coast. Moreover, there is always the possibility that some environmental changes resulting from a restoration effort would be more relevant to particular groups or communities than to others. For example, potential changes in fisheries would more likely be of immediate and direct interest to people who rely on those resources for income and/or subsistence. It is possible, therefore, that the design and implementation of a coastwide restoration program could potentially affect minority or low-income populations.

Potential EJ issues will be considered throughout the entire LCA study process, from study initiation through project implementation and monitoring. However, identifying potential EJ issues requires a level of detail that is not available at the programmatic level at which the LCA Plan is currently being developed. Although restoration features and their general locations are discussed as part of the LCA study report, the exact location, design, and operation of such features are subject to considerable change, depending on the outcome of future feasibility study and environmental review. Thus, at the programmatic level, there is only a general discussion of potential project impacts. Without further detail and specificity, it is neither possible nor appropriate at this point to try to identify particular populations or communities that might be disproportionately affected by a particular restoration feature.

Given that the LCA study planning effort is currently at the programmatic stage, it was determined that the best course of action relative to EJ was to (1) sensitize the PDT to EJ issues in Louisiana, (2) look and listen for potential EJ concerns during the NEPA process (particularly during the public hearings and comment period), (3) discuss the issue in general as part of the

DPEIS, (4) solicit input on potential EJ issues, and (5) commit to fully reviewing any potential EJ issues during the NEPA assessment of specific LCA restoration features.

On January 24, 2003, the PDT met with Dr. Beverly Wright, founder and director of the Deep South Center for Environmental Justice at Xavier University. During this meeting, the PDT also teleconferenced with EJ experts from the USEPA's Region 6 office in Dallas, Texas. The objective of this meeting was to begin informing and sensitizing PDT members to EJ issues.

As part of the NEPA process, the PDT held numerous public and scoping meetings, during which attention was given to any potential EJ issues. During these meetings, information was made available to the public to help assist in the identification of potential concerns, including potential EJ issues. Members of the PDT have also continued to look for potential EJ issues during development of the programmatic plan and the assessment of its potential affects.

Reviewing potential EJ issues at the project-specific level is arguably the most important step the PDT can take towards addressing potential EJ concerns. While the LCA Study process is not yet at the project-specific level, it is not too early to begin identifying potential EJ issues that should be more closely reviewed in the future. The District is committed to ensuring that any potential EJ issues are addressed as implementation of the LCA Plan proceeds. As part of this process, we encourage any interested parties to participate by informing us of potential concerns and by participating in the LCA Plan process in general.

#### **6.1.1.12                      Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-646)**

All property and/or real estate interests acquired for construction of the LCA project will be in accordance with the provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended in 1987 by P.L. 100-17. The Uniform Act sets forth procedures for the acquisition of private property for public use and specifically requires that the acquiring agency appraise the real property interests it wishes to acquire and provide the owner a written summary of the basis for the amount established as just compensation. The Real Estate Section of the Main Report outlines a proposed acquisition plan for this project. It is noted herein that although some project areas are designated for public use, those areas will not be open to the public until the vegetation is mature and the project is stabilized.

## **6.2                                      CONSISTENCY OF THE LCA PLAN WITH OTHER EFFORTS**

### **6.2.1                                  Finding The Balance**

In coastal Louisiana we are trying to find the balance between economic development and coastal restoration and protection. We must address both our economic and environmental needs, which are inextricably linked and yet often in conflict. This is a challenge facing restoration efforts across the country, from California to the Chesapeake Bay and the Everglades. However, this challenge is perhaps greatest in coastal Louisiana for the simple fact that we live and work in and among the same wetlands we rely on and need to protect. How we confront this

challenge will not only be critical for our future, but it may also serve as an example for other restoration efforts around the country. The LCA Plan has set the following goals for consistency with other programs:

- Instill confidence in the taxpayers and decision-makers that we have the solutions for ensuring both a healthy economy and a sustainable coast.
- Set the standard for balancing coastal restoration and development.

### **6.2.2 Ensuring Consistency Between Development, Coastal Protection, And Restoration**

Nowhere are the economy and the environment more inextricably linked than in coastal Louisiana. Louisiana's coastal wetlands support the Nation's second largest fishery and provide critical habitat for a vast array of wildlife, while at the same time also helping to protect navigation and energy infrastructure critical to the Nation's economy. The loss of Louisiana's coastal wetlands threatens these important economic assets, as well as the millions of people who live and work in coastal Louisiana. Protecting Louisiana's coastal wetlands is, therefore, essential for ensuring a vital state economy, while also protecting important sectors of the National economy.

Development activities - from navigation improvements and hurricane protection to residential and commercial construction - can harm the coastal environment. Yet, such activities are critical for a vital economy in coastal Louisiana and beyond. The challenge is to ensure that economic development does not undermine the wetlands and coastal ecosystems that are also intrinsic to long-term economic vitality. A moratorium on growth in the coastal zone is not the solution, nor is "business as usual."

We must be able to address critical societal needs such as hurricane protection, navigation, and economic development in a way that is, at a minimum, consistent with coastal restoration and protection efforts. Indeed, Section 303(d) of the CWPPRA mandates consistency for some important activities:

*Consistency.---(1) In implementing, maintaining, modifying, or rehabilitating navigation, flood control or irrigation projects, other than emergency actions, under other authorities, the Secretary, in consultation with the Director and the Administrator, shall ensure that such actions are consistent with the purposes of the restoration plan submitted pursuant to this section.*

Despite efforts to address this important provision, it is acknowledged by many stakeholders that a more thorough, comprehensive, and balanced effort is needed to ensure consistency across the coast. It is further recognized that once an LCA Plan is selected and approved, it would be the appropriate vehicle for beginning such an effort.

While growth will continue to occur, it must be done in a way that avoids and minimizes wetland impacts as much as possible. Federal and state actions affecting the coastal environment need to reflect the fundamental premise that it is less expensive and more effective to prevent wetland

loss, than it is to repair the damage. The challenge is to find balance between economic growth and wetland protection. While consistency between economic development and coastal restoration should be sought in every instance, it may be possible in some cases to go even further by devising ways to make such activities complement each other.

This section outlines key challenges with respect to ensuring consistency between development and coastal restoration. It then describes proposed action items for reducing conflict between the two. Some of the proposed action items represent new initiatives, while others describe or build upon ongoing efforts to improve consistency. For example, the proposals to enhance internal and external coordination would build upon the significant progress made to date as a result of the formation of an interagency collocated restoration team housed within the District. These proposed action items are intended to be a starting point for developing the processes and mechanisms needed to move towards greater consistency.

### **6.2.3 Need For Consistency**

#### **6.2.3.1 Consistency With CWPPRA**

The LCA Plan is consistent with and complementary to the CWPPRA. That act was passed in 1990 and sets up a Federal/State Task Force to prepare a plan to protect and restore Louisiana's disappearing coastal ecosystem. The CWPPRA Plan was completed in 1993, was improved in the Coast 2050 Plan, and served as part of the basis for development of the LCA Plan.

CWPPRA provides about \$50 million per year to construct coastal wetlands projects. With limited funding and loss coastwide, CWPPRA has concentrated on small-scale projects distributed across the coast. In contrast, the LCA Plan focuses on larger projects that would generally work at an ecosystem scale. From its inception until 2001, the CWPPRA program has built projects that are estimated to restore or preserve over 156,500 acres by 2050.

There is a need for both small and large projects to restore the coast and CWPPRA's contribution is significant. Thus, CWPPRA has a continuing contribution to make to coastal restoration.

#### **6.2.3.2 Regulatory Programs**

The Federal Government and the State of Louisiana share regulatory responsibility for a broad range of public and private development activities that take place in and around coastal wetlands. These activities include: residential and commercial development, oil and gas extraction, highway construction, and others. All of these activities can, to varying extents, harm wetlands. At the largest scale, it is possible for individual development projects to directly undermine coastal restoration efforts. Whereas, the smallest scale development activities can add incrementally to the cumulative loss of coastal wetlands.

Future development activities will continue to adversely impact Louisiana's coastal wetlands. However, it is both unreasonable and undesirable to place a moratorium on future human development. Although existing regulatory programs have reduced wetland losses from development, Louisiana's unique coastal wetland loss problems necessitate further efforts to

ensure effective protection of these resources. Consistent with the longstanding Federal regulatory policy of no net loss of wetlands, the District, partnering with Federal and state regulatory agencies, would implement the actions presented below to further avoid and minimize adverse impacts to Louisiana's coastal wetlands.

Special attention will be paid to identifying ways to avoid and minimize potential impacts through the use of environmentally appropriate development approaches. For example, the construction of new highways can have significant direct, indirect, and cumulative wetland impacts. However, the use of environmentally appropriate design and construction techniques can greatly reduce potential adverse impacts. Specifically, the use of so-called "end-on" highway construction has been used to greatly reduce the environmental impacts of highways in coastal Louisiana. Identifying and employing such environmentally sensitive techniques will be critical for protecting Louisiana's valuable coastal wetlands, while also meeting important economic and safety needs.

#### **6.2.3.3 Hurricane Protection**

As a result of ongoing wetland loss, communities across coastal Louisiana are increasingly at risk from tropical storms and hurricanes. Currently, there are a number of large-scale hurricane protection projects in the planning stages. While in many cases such further protection is needed, levee projects can result in significant wetland losses if not sited, designed, and operated correctly. These losses can include direct impacts from the placement of the levee and borrow areas; and indirect and secondary effects from modified hydrology and induced development. Such impacts can further reduce the natural storm protection wetlands provide.

Many communities in coastal Louisiana are very much in need of increased hurricane protection. Fortunately, techniques and approaches do exist for avoiding and minimizing wetland impacts when developing hurricane protection projects. In some cases, it may even be possible for hurricane protection levees to complement wetland protection efforts. The challenge, therefore, is to increase structural protection where needed while, at a minimum, not decreasing the natural protection and other important functions and values provided by wetlands. The District is studying the following new or expanded hurricane protection and flood protection projects: "West Bank," "Morganza to the Gulf of Mexico," "Donaldsonville to the Gulf of Mexico," "Mississippi River Levees and Berms," "Vermilion River Bridges and Culverts," "Alexandria to the Gulf of Mexico," and "The Lower Atchafalaya Basin Reevaluation Study."

#### **6.2.3.4 Navigation**

Efficient and effective navigation in and through coastal Louisiana is critical to local, statewide, and national economies. However, the creation, expansion, and ongoing maintenance of navigation channels can and has had significant impacts on wetlands. Such impacts include the direct loss of wetlands from channel excavation, enlargement, and maintenance, and indirect losses from hydrologic modification, salinity intrusion, and increased wake-induced erosion. The continued loss of coastal wetlands can threaten the integrity, safety, and efficiency of existing navigation routes and the communities and industries they serve. The District is currently studying the deepening of the following existing navigation channels: "Mississippi

River Ship Channel;" "Houma Navigation Canal;" "Acadiana-Gulf of Mexico Access Channel;" "Chene, Boeuf and Black Navigation Channel;" and "Calcasieu Ship Channel."

The District uses hopper dredges to maintain only the near-shore channel reaches of Southwest Pass, MRGO, and the Calcasieu River Navigation Channel. In the last two channels, the dredge removes material and places it adjacent to the removal site so it is still in the littoral drift. In the first channel, the dredge removes sediments from the coastal system and disposes it in deeper water offshore sites. This removal of material from the coastal littoral system reduces the sustainability of nearby barrier headlands and adjacent marshes. Navigation projects can, however, offer opportunities to use dredged material beneficially for restoration purposes (e.g., marsh creation).

Upgrading our navigation system is necessary to ensure the vitality of this critical economic asset. We need to develop ways to ensure that future navigation projects avoid and minimize wetland losses as much as possible, while simultaneously maximizing the beneficial use of dredged material for restoration activities.

#### **6.2.4 Proposed Action Items**

##### **6.2.4.1 Regulatory Programs**

It is important to ensure that regulated activities within the coast do not undermine or run counter to Louisiana coastal restoration efforts. To that end, once an LCA Plan has been selected, the District, working with the state, proposes to:

- Continue reviewing permit applications to avoid and minimize potential conflicts with the LCA Plan.
- Use best available science tools to assess the environmental effects of the regulatory program.
- Consider the effects of restoration projects during the review of permit applications.
- Further enhance the effectiveness of compensatory mitigation.
- Encourage private mitigation banks that support LCA Plan objectives.
- Enhance internal coordination.
- Encourage and support wetland-planning efforts.
- Expedite the regulatory review of public and private activities that are fully consistent with the LCA Plan.
- Review options for increasing protection of vulnerable areas.

##### **6.2.4.1.1 *Continue Reviewing Permit Applications To Avoid and Minimize Potential Conflicts With The LCA Plan***

During the review of permit applications for projects affecting areas within the LCA Plan boundary, the District, working with the state, would work to avoid and minimize any potential conflict with coastal restoration efforts. Specifically, permit applications would be reviewed to ensure that regulated activities: (1) do not undo or substantially reduce the beneficial effects of any existing restoration project(s), and (2) do not prevent or unduly restrict future coastal

restoration projects. These determinations would be made through enhanced internal and external coordination (see section 6.2.4.1.6 Enhance Internal Coordination). In addition, comments from landowners, commenting agencies, and the general public regarding the potential effects of proposed projects on restoration activities would be fully considered during the permit review process. Where necessary and appropriate, permits would contain conditions for minimizing potential conflict with the LCA Plan, once a plan is selected.

#### **6.2.4.1.2                    *Use Best Available Science Tools To Assess The Environmental Effects Of The Regulatory Program***

Understanding the direct, indirect, and cumulative effects of wetland permit decisions is critical for determining whether the regulatory program is achieving the CWA Section 404 goal of no net loss of wetland functions. However, it continues to be technically challenging to assess the landscape-level effects of multiple wetland impacts. The science tools being developed as part of the LCA Plan could potentially help examine the effects of permit decisions, particularly with respect to cumulative impacts. Specifically, the modeling, monitoring, and other technical evaluations that would be an important part of the LCA Plan implementation process could enable better assessment of how wetland permit decisions might impact wetland functions within a given basin and coast-wide.

Accordingly, the District proposes to use, where appropriate and available, LCA science tools to assess the potential cumulative effects of the Federal regulatory permit program within the boundary of the LCA study area. Individual permit proposals that would result in potentially significant direct, indirect, and/or cumulative impacts to waters of the U.S. would be evaluated on a project-by-project basis. However, the review of specific permit applications would not be delayed while science tools are being developed. Rather, such tools would be used in the regulatory program only when they become available and their use would not unduly delay project review.

#### **6.2.4.1.3                    *Consider The Effects Of Restoration Projects During Permit Review Process***

The review of permit applications would take into account the effects that existing restoration projects may have on the wetlands and other aquatic resources at issue. All things being equal, wetland areas that benefit from coastal restoration efforts would be healthier, more productive, more sustainable, and provide greater functions than comparable areas where no such restoration has occurred. This increased functional capacity would be acknowledged and considered as part of the CWA Section 404 permit review process, particularly with respect to the analysis of alternatives and the determination of compensatory mitigation. Additionally, Federal, state, and local support for protection and restoration of coastal Louisiana would be fully considered during the public interest review for all permit applications within coastal Louisiana.

The LDNR Office of Coastal Restoration and Management's existing procedures to identify potential regulatory and restoration conflicts would continue to be utilized to support the goals of the LCA Program (personal communication August 15, 2003, with Honora Buras, LDNR). This procedure is as follows:

If a proposed project is within 1/4 of a mile from either an active restoration project or a proposed restoration project, Coastal Management Division (CMD) submits a request to Coastal Restoration Division (CRD) to review the proposed activity with regard to its potential effect on the restoration project. If CRD's review determines that the proposed project would interfere or have adverse effects on a restoration project, then CMD informs the applicant and requires that the applicant communicate and coordinate with CRD. A CMD authorization is not issued until CRD has indicated that it has no objections to the proposed project.

#### **6.2.4.1.4                      *Further Enhance The Effectiveness Of Compensatory Mitigation***

Effective mitigation of unavoidable wetland impacts is critical to the overall success of the CWA Section 404 program. If done properly, compensatory mitigation can offset lost wetland functions; thereby greatly reducing the chances that specific activities authorized under CWA Section 404 could be counter to or inconsistent with the coastal restoration efforts. Despite progress, however, it is recognized that compensatory mitigation does not always guarantee full replacement of wetland functions. To enhance the effectiveness of compensatory mitigation, on December 24, 2002, the USACE and USEPA, in conjunction with other Federal agencies, issued the "National Wetlands Mitigation Action Plan," which contains 17 actions designed to improve mitigation performance in a number of areas.

The "National Wetlands Mitigation Action Plan," along with associated policy guidance, emphasizes the importance of effective tracking and monitoring of compensatory mitigation projects. This is particularly true in Louisiana, where there are over 90 active, closed, or proposed mitigation areas in the District alone. Unfortunately, high permit review workloads limit the District's ability to effectively monitor and track ongoing and completed compensatory mitigation areas.

Given the importance of effective compensatory mitigation to ensuring that regulated activities do not run counter to restoration efforts, the District would review opportunities to help support mitigation projects within the boundary of the LCA study area. Such support could, for example, include the incorporation of compensatory mitigation projects within the monitoring framework used for whatever plan is selected, along with other efforts to share technical expertise and scientific tools.

#### **6.2.4.1.5                      *Encourage Private Mitigation Banks That Support LCA Plan Objectives***

Mitigation banking has the potential to benefit both the environment and the regulated community. Mitigation banks can provide larger, more ecologically valuable, and more manageable wetland areas than piecemeal, permit-by-permit compensatory mitigation efforts. Mitigation banks can also be sited and designed to take into account the special needs of a particular watershed or hydrologic basin. For the developer, mitigation banking offers a quicker, simpler, and more predictable way to address compensatory mitigation requirements. If sited, designed, and operated properly, specific mitigation banks could complement coastal restoration efforts. For example, a marsh creation bank might be sited in the influence area of a river re-introduction project such that the bank becomes more sustainable, while also resulting in

increased nutrient and sediment retention within the given basin. The District would support the establishment of private, entrepreneurial mitigation banks that complement the LCA Plan by helping to identify mitigation bank sites that are consistent with the selected plan, and assisting in the conceptual design of such banks. Consistent with longstanding CWA Section 404 policy, compensatory mitigation will be used only after potential adverse impacts to wetlands have been avoided to the maximum extent practicable.

#### **6.2.4.1.6                      *Enhance Internal Coordination***

Effective coordination is critical for ensuring that activities authorized under CWA Section 404 do not conflict with coastal restoration efforts. The LCA study PDT would work closely with District personnel responsible for reviewing CWA Section 404 permit applications to help identify cases where proposed development projects might affect existing restoration projects or could have the potential to interfere with future restoration efforts. This coordination has begun; however, further dedication of staff resources is needed for full and effective coordination. Additionally, staff and managers from the regulatory and coastal restoration offices would meet periodically to review on-going and future projects, identify potential conflicts, and further develop strategies for ensuring consistency.

#### **6.2.4.1.7                      *Encourage And Support Wetland Planning Efforts***

Wetland planning can increase certainty for the regulated community, enhance wetland protection, reduce conflict, and expedite permit processing for environmentally acceptable projects. In the context of CWA Section 404, such planning often entails the identification and functional assessment of wetland resources in a given geographic area. This information is then used to identify areas that are generally suitable for development, along with areas that are generally not suitable for development. Local officials and private parties can then use the results to help identify appropriate future development locations. The information can even be used to develop specific regulatory tools, such as general permits for certain activities in appropriate locations, mitigation banks, and additional protection measures for valuable sites.

Wetland planning efforts are resource intensive in the short-term. Therefore, wetland planning is often most appropriate in areas where high growth rates threaten particularly valuable wetland resources. To be successful, such planning efforts must have strong local involvement and support. In recognition of the potential benefits of wetland planning, the District would support wetland-planning efforts in areas that are critical to coastal restoration and where there is strong local support for such planning. The ultimate success of such planning depends upon the extent to which the outcome is embraced and supported by the local community, along with local, state, and Federal sponsors.

#### **6.2.4.1.8                      *Expedite The Regulatory Review Of Public And Private Activities That Are Fully Consistent With The LCA Plan***

It is also important to ensure the regulatory program expedites the permitting of public and/or private restoration activities that are fully consistent with the LCA Plan. There is currently a nationwide permit Number 27 that authorizes restoration, enhancement, and creation of tidal,

nontidal and riparian wetlands. Also, the District on May 1, 1998, announced a Programmatic General Permit that provides expedited authorization of certain wetland restoration activities (excluding CWPPRA Projects) within the Louisiana Coastal Zone specifically designed to have a beneficial effect on wetlands and/or aquatic resources such as backfilling of artificial channels, terracing in open water areas and planting of appropriate wetland species to restore degraded wetland habitats. Wetland restoration activities not authorized by nationwide or general permits may nevertheless be fully consistent with the LCA Plan, and should, therefore, be expedited as much as possible. Coordination between regulatory officials and members of the LCA PDT would help determine when restoration proposals are fully consistent with the LCA Plan. For restoration proposals that are consistent with LCA, efforts would be made to expedite permit processing by, making available information developed for the LCA Plan to help address environmental assessment needs for the particular project. It may even be possible to develop a general permit designed for a specific class of activities that are fully consistent with the LCA Plan. Such a regulatory tool would help encourage and expedite environmentally beneficial projects.

#### **6.2.4.1.9                      *Review Options For Increasing Protection Of Vulnerable Areas***

In some cases, it may be possible for activities allowed under the existing regulatory program to undermine the beneficial effects of restoration projects. For example, there is much concern that certain logging activities, which fall under the CWA Section 404(f) silvicultural exemption, could in some cases undermine efforts to restore coastal swamp. Using public monies to restore vulnerable areas could be questionable, unless there is some way to increase the protection of the area so that activities that would undermine restoration efforts are precluded.

Tools for increasing the protection of vulnerable areas include acquisition and conservation easements/servitudes. Such approaches rely first and foremost on the willingness of the landowner to sell his/her property or restrict future activities at the given site. Obviously, such measures would also increase the cost of restoration efforts, and should only be used where existing laws may not adequately protect potential restoration areas. In such cases, it would be hoped that in return for public funding of restoration of a landowner's property, that landowner would in turn be willing to consider some restrictions on future activities.

As the development of the LCA planning process continues, the PDT would work closely with interested stakeholders to review tools for increasing protection of vulnerable areas.

#### **6.2.4.2                      Hurricane Protection Projects**

The District recognizes the importance of ensuring that hurricane protection efforts are consistent with coastal restoration efforts. To that end, the team proposes to:

- Develop guiding principles for ensuring consistency between hurricane protection and coastal restoration.
- Assess whether on-going and future hurricane protection projects are consistent with the LCA Plan during the NEPA review of such projects.

- Use best available science tools to assess environmental effects of hurricane protection projects.
- Enhance internal and external coordination.
- Seek opportunities to develop hurricane protection projects that complement coastal restoration.

#### **6.2.4.2.1                    *Develop Guiding Principles For Ensuring Consistency Between Hurricane Protection And Coastal Restoration***

To help ensure consistency between hurricane protection and coastal restoration efforts, the PDT would collaborate with interested parties (including environmental interests, landowners, state and local government, other Federal agencies, and business interests) to develop guiding principles regarding the ecologically appropriate design, siting, implementation, and operation of hurricane protection projects in coastal Louisiana. Building upon the USACE's environmental operating principles, the hurricane protection guiding principles would emphasize the need to avoid and minimize wetland impacts to the maximum extent practicable, and to ensure that such projects do not interfere with or preclude restoration projects. The guiding principles would also emphasize the benefits of building upon the upland/wetland interface and/or existing levees. In addition to the issue of avoiding direct wetland impacts, the guiding principles would address the need to avoid hydrologic modifications that could result in indirect and secondary wetland losses. The guiding principles would then be applied, as appropriate, to ongoing and future hurricane protection projects. The guiding principles have the potential to both enhance consistency and expedite project reviews by addressing key project design and citing issues in advance.

#### **6.2.4.2.2                    *Assess Whether On-Going And Future Hurricane Protection Projects Are Consistent With The LCA Plan During The National Environmental Policy Act (NEPA) Review Of Such Projects***

The NEPA review of ongoing and future hurricane protection projects is the appropriate venue for assessing whether such projects are consistent with coastal restoration in general and, the LCA Plan in particular. Accordingly, it is recommended to have a section, in all relevant NEPA documents, that evaluates whether and the extent to which the particular project is consistent with coastal restoration. As necessary, such NEPA documentation would also examine alternatives for making the project more consistent and, if possible, complementary with coastal restoration. Among other benefits, this would provide the public and decision-makers with a better opportunity to participate in efforts to ensure consistency between hurricane protection and coastal restoration on a project-by-project basis.

#### **6.2.4.2.3                    *Use Best Available Science Tools To Assess Environmental Effects Of Hurricane Protection Projects***

As with the wetland regulatory program, fully understanding direct, indirect, and cumulative environmental effects of proposed hurricane protection projects is essential for avoiding, minimizing, and offsetting any potential adverse effects. Yet, assessing the landscape-level effects of large-scale hurricane protection projects continues to be technically challenging. The

science tools being developed for the LCA Plan could potentially help examine the effects of such projects, particularly with respect to cumulative impacts. These tools might also assist in designing hurricane protection projects in a way that complements coastal restoration efforts. However, the review of specific projects should not be held while the LCA science tools are under development. Rather, such tools would be used only when they are available and their use would not unduly delay project review.

#### **6.2.4.2.4                    *Enhance Internal And External Coordination***

Hurricane protection projects often involve challenging technical and social issues. The siting and design of hurricane protection levees affects the safety and viability of coastal communities into the future, and can have broad, landscape-level impacts on the coastal environment. Developing effective hurricane protection, while also protecting and restoring the coastal environment, requires a wide range of expertise and extensive teamwork. Better internal and external coordination is needed to more effectively meet these two goals. Internally, representatives of the PDT would participate in all hurricane protection projects, to ensure consistency with existing and future restoration projects. In seeking public comments on proposed hurricane protection projects, the PDT would help provide the public with information regarding ongoing and future restoration efforts in the project area. The PDT would fully consider all input regarding how such restoration efforts might be affected by the proposed hurricane protection project.

#### **6.2.4.2.5                    *Seek Opportunities To Develop Hurricane Protection Projects That Complement Coastal Restoration***

In some case, it may be possible to design hurricane protection projects so that they facilitate or enhance restoration efforts. For example, the USACE is currently conducting a feasibility study regarding the Donaldsonville to the Gulf Hurricane Protection Project. As part of this study, the USACE has the ability to review opportunities to facilitate future restoration projects by restoring the natural hydrologic regime in the Barataria Basin. To the extent that such complementary solutions can be identified, the public stands to benefit from both improved structural hurricane protection, and the natural protection provided by coastal wetlands (along with other important wetland functions). The enhanced coordination and guiding principles discussed above could be used to help identify such solutions.

#### **6.2.4.3                    Navigation Projects**

As with regulatory and hurricane protection activities, there is a need to ensure consistency between navigation projects and coastal restoration. To that end, the District proposes to:

- Develop guiding principles for ensuring consistency between navigation and coastal restoration.
- Use best available science tools to assess cumulative effects of navigation projects (see above).
- Increase beneficial use of dredged material.
- Enhance internal and external coordination.

#### **6.2.4.3.1                    *Develop Guiding Principles For Ensuring Consistency Between Navigation And Coastal Restoration***

To help improve coordination between navigation projects and coastal restoration efforts, the District would collaborate with interested parties (including navigation interests, landowners, state and local government, other Federal agencies, businesses, and environmental organizations) to develop guiding principles regarding ecologically appropriate approaches for navigation improvement projects in coastal Louisiana. The guiding principles would emphasize the need to avoid and minimize wetland impacts, and to ensure that such projects do not interfere with or preclude restoration projects. In addition to the issue of avoiding direct wetland impacts, the guiding principles would address the need to avoid salinity increases and hydrologic modifications that could result in indirect and secondary wetland losses. The guiding principles would then be applied, as appropriate, to ongoing and future navigation improvement projects.

#### **6.2.4.3.2                    *Increase Beneficial Use Of Dredged Material***

The District fully recognizes the value of using dredged material for beneficial projects such as marsh creation. Given that many areas in coastal Louisiana are sediment deprived, we should take advantage of every opportunity to use dredged material from navigation projects to help bring new sediments into the coastal environment in the form of created marsh and other environmental features. There are many instances, however, when budgetary and related policy constraints limit the extent to which dredged material can be used beneficially for coastal restoration purposes. In such cases, additional funds from another source could cover the incremental cost of using more of the dredged material for marsh creation or other environmental projects. The Plan proposes a program similar to the Continuing Authorities Section 204 of the WRDA 1992 to further the beneficial use of dredged material above and beyond that currently done under the District's dredging maintenance program. Funding for the cost could be provided by the LCA project funds and be cost-shared with the non-Federal sponsor. Execution of this program could be coordinated between the CRT and the District's Operations manager.

#### **6.2.4.3.3                    *Enhance Internal And External Coordination***

Further internal and external coordination is needed to ensure consistency between navigation projects and coastal restoration efforts. Internally, a representative of the PDT would participate fully in all navigation improvement projects to ensure consistency with existing and future restoration projects. In seeking public comments on proposed navigation improvement projects, the PDT would help provide the public with information regarding ongoing and future restoration efforts in the project area, and would fully consider all input regarding how such restoration efforts might be affected by the proposed navigation project.

#### **6.2.4.4                    Other Mississippi Valley, New Orleans District Projects**

The proposed consistency action items focus on regulatory activities and future and ongoing hurricane protection and navigation projects. In some instances it could also be appropriate to review the extent to which the maintenance and operation of existing projects are consistent with coastal restoration activities, and recommend changes to such projects where necessary and

practicable, to ensure consistency with restoration efforts. Similarly, it is also recognized that there are other USACE activities (beyond hurricane protection, navigation, and the regulatory program) that could have implications with respect to coastal restoration efforts (e.g., Continuing Authorities Projects). These other activities should also be reviewed and modified, where necessary and practicable to ensure consistency with coastal restoration. The District supports the review of any and all existing, ongoing, and future USACE projects, where such review is necessary to minimize a potential conflict with coastal restoration or where there is an opportunity to have such projects complement coastal restoration efforts. Based on such a review, recommendations for any and all modifications that are necessary and practicable to improve consistency with coastal restoration efforts would be made.

### **6.2.5 Rare And Unique Designations Of Habitats**

The District would fully coordinate with the LDWF for threatened and endangered species and rare and unique habitats under the state's jurisdiction.

### **6.2.6 Coastal Zone Management Act**

The Coastal Zone Management Act (CZMA) was enacted in 1970 to develop a national program to manage competing uses of and impacts to coastal resources, through the approved management programs of individual participating states. The CZMA Federal consistency requirement mandates that Federal agency activities be consistent to the maximum extent practicable with the enforceable policies of the approved state management program. The Louisiana Coastal Resources Program (LCRP) was approved by the NMFS in September 1980 and began implementation on October 1, 1980, and is administered by the LDNR, CMD.

The relevant citations and specific language are reproduced below, but in summary, a Federal agency must review any activity it proposes for consistency with the approved state program, and then present that conclusion and supporting information to the state for review and concurrence or non-concurrence. The Federal review must include all reasonably foreseeable direct and indirect, secondary, and cumulative impacts to coastal resources.

Coordination between state and Federal agencies, particularly for large, complex projects or programs, should occur at an early stage. Usually this would be during the preparation of the DPEIS, before the Federal agency reaches a significant point in its decision-making and while there is still time to modify the activity. 'Coordination' does not necessarily refer to the formal Consistency Determination, rather, the Federal and state agencies should communicate as to the proposed project plans and how they can best meet the requirements of the coastal management program.

In cases where the proposed Federal activity is complex or dependent upon future developments, the need for early coordination can be met through the use of a 'phased consistency.' In brief, a phased consistency is prepared in stages over the planning life of the project. Initially, a Consistency Determination is submitted once the broad scope of the project has been established. As specific elements of the project are refined or additional information is developed,

supplemental Consistency Determinations are prepared at a level of detail appropriate for those components.

As an example, a major freshwater diversion (reintroduction) project may undergo initial design that lasts several years. The proposed location, size, operating parameters, and many other details may be identified in a general way relatively early in the planning, but as planning proceeds and specific problems and opportunities are encountered, the plan is modified.

Consistency coordination at the earliest stages ensures that the overall concept would meet with state agency approval. Continued coordination as the plan evolves would assure that the specific elements are consistent with the state program prior to their construction.

It is anticipated that the LCA Plan, being a large and complex program with a great many component projects, still in the conceptual stage, would best be served by the phased consistency approach (personal communication with Mr. Jeff Harris, LDNR). The overall goals and methods outlined in the LCA Main Report and this DPEIS would be coordinated with LDNR during the planning stage, and submitted for consistency review once the preferred alternative has been identified. As each of the individual projects selected to implement the LCA Plan are conceived and designed, that phase of the program would be fully coordinated with the state management program pursuant to state and Federal consistency provisions.